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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
RALIS, STEPHEN J	
ART UNIT	PAPER NUMBER
3742	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/573,107	ARTELSMAIR, JOSEF	
	Examiner	Art Unit	
	STEPHEN J. RALIS	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment/Arguments

1. Applicant's amendment/arguments, see pages 8-15, filed 24 June 2008, with respect to the rejection(s) of claim(s) 1-20 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hozumi et al. (U.S. Patent No. 4,249,062) and copending Application No. 11/883,497 as set forth below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Applicant is respectfully requested to provide a location within the disclosure to support any further amendments to the claims due to when filing an amendment an applicant should show support in the original disclosure for new or amended claims. See MPEP § 714.02 and § 2163.06 ("Applicant should specifically point out the support for any amendments made to the disclosure.").

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 11/883/497 in view of Hozumi et al. (U.S. Patent No. 4,249,062).

Claims 1-20 of the instant application and claims 1-20 of copending Application No. 11/883,497 are not identical, however, they are not patentably distinct from each other because the claims of the instant application are merely broader in scope than that of the copending application.

Moreover, while the copending Application No. 11/883,497 discloses all of the limitations of the claimed invention as previously noted , except for specifying that the mechanical adjustment "determines the position of the welding wire" and the process being carried out during the welding process as the wire is being used as the sensor.

However, a mechanical adjustment determining the position of the welding wire and the process being carried out during the welding process as the wire is being used as the sensor is known in the art. Hozumi et al. teach a mechanical adjustment determining the position of the welding wire and the process being carried out during the welding process as the wire is being used as the sensor ((column 15, line 42 – column 16, line 53). Hozumi et al. further teach the advantage of such a configuration provides a means to adjust the length of the protruding length consumable electrode to provide a desired welding finishing and quality. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify copending Application No. 11/883,497 with the sensing and moving of the wire position during welding processing of Hozumi et al. in order to provide a means to adjust the length of the protruding length consumable electrode to provide a desired welding finishing and quality.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation of "a welding process" in lines 1-2, "a welding process" in lines 2-3 and "the welding process" in line 7. It is unclear and uncertain to the examiner to whether there or two distinct "welding processes" or just one "welding process". Further clarification is required.

Claim 3 recites the limitation "the workpiece (16)" in lines 3-4; Claims 4, 16 and 17 recite the limitation "the electric arc (15)"; Claim 5 recites the limitation "the recognition" in line 3; Claim 6 recites the limitation "the position" in line 2; Claim 12 recites the limitation "the expiration" in lines 3-4; Claim 13 recites the limitation "the wire advance speed (V)" in line 2; Claim 15 recites "the length" in line 2. There are insufficient antecedent basis for these limitation in the claims.

Claim 8 recites the limitation "relative to the same". It is unclear and uncertain to the examiner to what "the same" refers to. Further clarification is required.

Claims 18 and 19 recite the limitation "a mechanical adjustment process (41). The preceding claim 1 recites the limitation of "at least one mechanical adjustment process (41). It is unclear and uncertain to the examiner to whether "a mechanical adjustment process (41)" latter recited in claims 18-20 is the same or different from the "at least one mechanical adjustment process (41)" previously recited in the preceding claim 1. If they are different, structural and operational cooperative relationships between the two are required.

In general, the claims are replete with such 35 U.S.C. 112, second paragraph issues. The above notes are exemplary with respect to all of the 35 U.S.C. 112, second

paragraph rejections present in the instant case, all claims must be carefully reviewed and appropriate corrections should be made in response to this rejection.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 2, 10, 11 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hozumi et al. (U.S. Patent No. 4,249,062).

Hozumi et al. disclose a method for controlling a welding process using a melting welding wire (consumptive electrode 209), wherein a welding process adjusted on the basis of several different welding parameters and controlled by a control device (control box) is carried out after the ignition of an electric arc, wherein at least one mechanical adjustment process (moving torch to and/or from the workpiece) is carried out during the welding process to determine the position of the welding wire (consumptive electrode 209) (column 15, line 42 – column 16, line 53), using the welding wire (consumptive electrode 209) as a sensor (column 16, lines 11-53).

With respect to the limitations of claim 2, Hozumi et al. disclose the mechanical adjusting process (moving torch to and/or from the workpiece) satisfying the welding voltage and welding current during the process which would reduce the amount of welding wire material that is melting. Therefore, Hozumi et al. fully meets “during the

mechanical adjustment process (41), the welding parameters are controlled in a manner that no or only little welding wire material melting is effected" given its broadest reasonable interpretation.

With respect to the limitations of claims 10 and 11, Hozumi et al. disclose the process as being an automated welding mode process which would include a trigger signal and settings selected by a user as well as default values.

With respect to the limitations of claims 18-20, Hozumi et al. disclose the process as being an automated welding mode process which would include motion at the beginning, middle and end of the automated welding mode process as disclosed.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa et al. (JP 11058012 A) in view of Hozumi et al. (U.S. Patent No. 4,249,062).

Nishikawa et al. disclose a method of welding wherein several welding parameters, namely current and voltage associated with a wire-to-workpiece contact during the welding process, are used to calculate wire stick-out, thus using the wire as a sensor (English abstract and the discussion at paragraph 20 of the machine generated English translation; see Figures 5 and 6). This sensed wire stick-out is used to adjust torch height during the welding procedure.

Nishikawa et al. disclose all of the limitations of the claimed invention, as previously set forth, except for in specifying that the mechanical adjustment "determines the position of the welding wire" and the process being carried out during the welding process as the wire is being used as the sensor.

However, a mechanical adjustment determining the position of the welding wire and the process being carried out during the welding process as the wire is being used as the sensor is known in the art. Hozumi et al. teach a mechanical adjustment determining the position of the welding wire and the process being carried out during the welding process as the wire is being used as the sensor ((column 15, line 42 – column 16, line 53). Hozumi et al. further teach the advantage of such a configuration provides a means to adjust the length of the protruding length consumable electrode to provide a desired welding finishing and quality. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Nishikawa et al. with the sensing and moving of the wire position during welding processing of Hozumi et

al. in order to provide a means to adjust the length of the protruding length consumable electrode to provide a desired welding finishing and quality.

14. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mita et al. (EP 774317 A1 – Applicant Admitted Prior Art or APAA) in view of Hozumi et al. (U.S. Patent No. 4,249,062).

Mita et al. (APAA) disclose a method for controlling a welding process using a melting welding wire as set forth in the page 1 of the disclosure of the instant application.

Mita et al. (APAA) disclose all of the limitations of the claimed invention, as previously set forth, except for in specifying that the mechanical adjustment "determines the position of the welding wire" and the process being carried out during the welding process as the wire is being used as the sensor.

However, a mechanical adjustment determining the position of the welding wire and the process being carried out during the welding process as the wire is being used as the sensor is known in the art. Hozumi et al. teach a mechanical adjustment determining the position of the welding wire and the process being carried out during the welding process as the wire is being used as the sensor (column 15, line 42 – column 16, line 53). Hozumi et al. further teach the advantage of such a configuration provides a means to adjust the length of the protruding length consumable electrode to provide a desired welding finishing and quality. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Mita et al.

(APAA) with the sensing and moving of the wire position during welding processing of Hozumi et al. in order to provide a means to adjust the length of the protruding length consumable electrode to provide a desired welding finishing and quality.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN J. RALIS whose telephone number is (571)272-6227. The examiner can normally be reached on Monday - Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen J Ralis/
Primary Examiner, Art Unit 3742

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Primary Examiner
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SJR
September 26, 2008